

**DETAILED ACTION**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Luminita A. Todor on 12/04/2009.

The application has been amended as follows:

In the claims:

Claims 2 and 6 have been cancelled.

Claims 1, 5, 10, 11 and 16 have been re-written as follows:

Claim 1 (re-written). An optical disk, comprising: a substrate including resin-impregnated paper in which a resin has been impregnated into paper or resin-coated paper in which paper surface has been coated with a resin; wherein a centerline average roughness Ra of at least one side of the substrate is 0.5 $\mu$ m or less, and a maximum roughness Rmax is 6.0 $\mu$ m or less; a recording layer provided on at least one side of the substrate wherein the recording layer has a recording layer base material that serves as a support for the recording layer, and the recording layer base material includes a non-hydrophilic film; a printing layer provided on at least one side of the substrate, having a printing base material and a printed ink applied to a surface of the printing base material facing the substrate; and at least one release layer provided between the substrate and the

Art Unit: 2627

recording layer and/or between the substrate and the printing layer, wherein the substrate has peripheral edges protected by resin coating or by attaching a resin cover and/or by being shaped into a curve.

Claim 5 (re-written). An optical disk according to claim 1, further comprising: a protective layer to protect the recording layer.

Claim 10 (re-written). An optical disk according to claim 1,-wherein the at least one release layer includes a release layer provided between the substrate and the recording layer.

Claim 11 (re-written). An optical disk according to claim 1, wherein the at least one release layer includes a release layer provided between the substrate and the printing layer.

Claim 16 (re-written). A manufacturing method of an optical disk according to any of claims 12 and 14, further comprising: release layer formation in which a release layer is formed on at least one side of the resin-impregnated paper or resin-coated paper in advance.

***Allowable Subject Matter***

2. Claims 1, 5, 7, 10-12, 14, 16-19 and 21-24 allowed.

3. The following is an examiner's statement of reasons for allowance: The cited prior art of record considered as a whole (either alone or in combination) fails to teach or suggest:

An optical disk, comprising: a substrate including resin-impregnated paper in which a resin has been impregnated into paper or resin-coated paper in which paper surface has been coated with a resin; wherein a centerline average roughness Ra of at least one side of the substrate is  $0.5\mu\text{m}$  or less, and a maximum roughness Rmax is  $6.0\mu\text{m}$  or less; a recording layer provided on at least one side of the substrate wherein the recording layer has a recording layer base material that serves as a support for the recording layer, and the recording layer base material includes a non-hydrophilic film; a printing layer provided on at least one side of the substrate, having a printing base material and a printed ink applied to a surface of the printing base material facing the substrate; and at least one release layer provided between the substrate and the recording layer and/or between the substrate and the printing layer, wherein the substrate has peripheral edges protected by resin coating or by attaching a resin cover and/or by being shaped into a curve.

### ***Conclusion***

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HENOK G. HEYI whose telephone number is (571)270-1816. The examiner can normally be reached on Monday to Friday 8:30 to 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph H. Feild/  
Supervisory Patent Examiner, Art  
Unit 2627

/Henok G Heyi/  
Examiner, Art Unit 2627